

MEASLES HA INSERT FOR THE HN-L JUNCTION

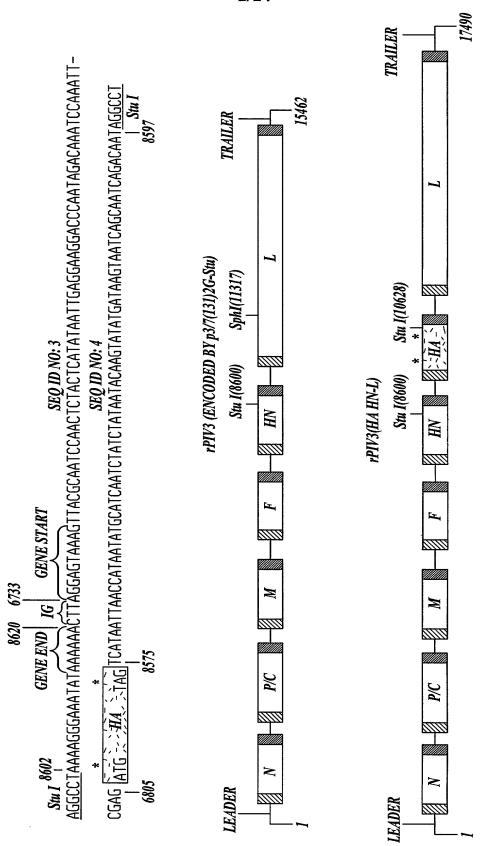


Fig. 1B

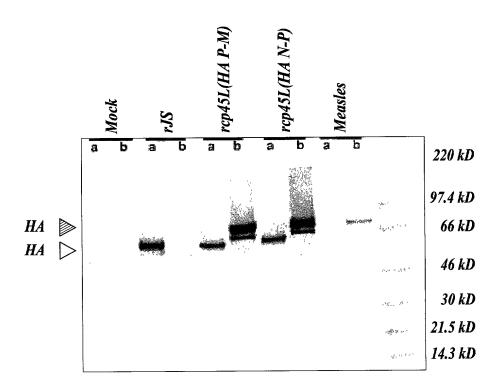


Fig. 2

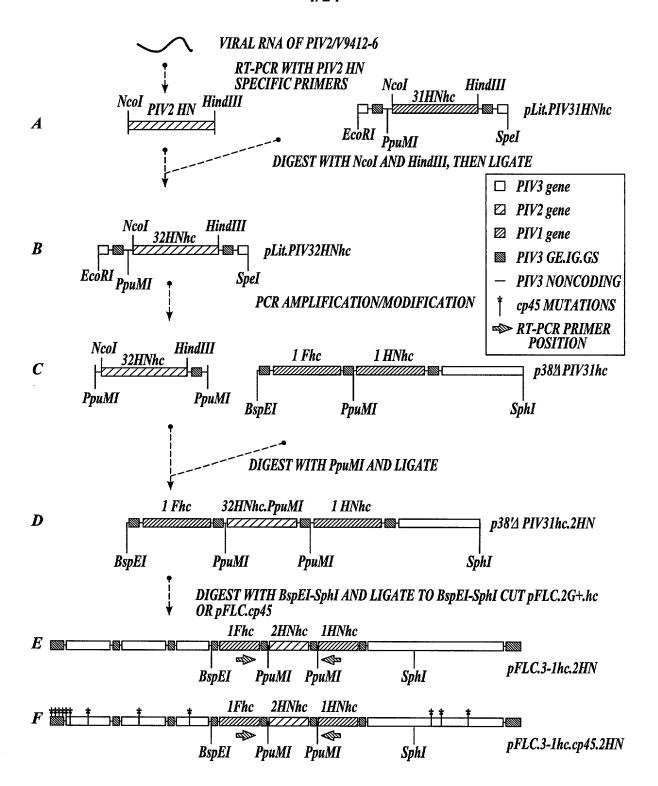
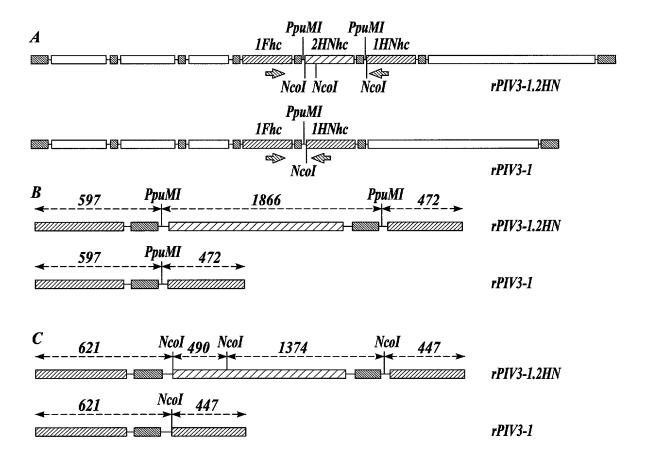


Fig. 3



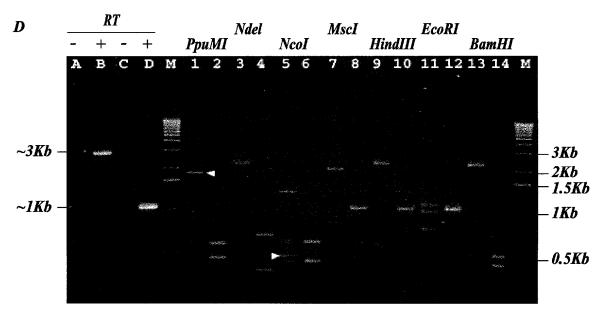


Fig. 4

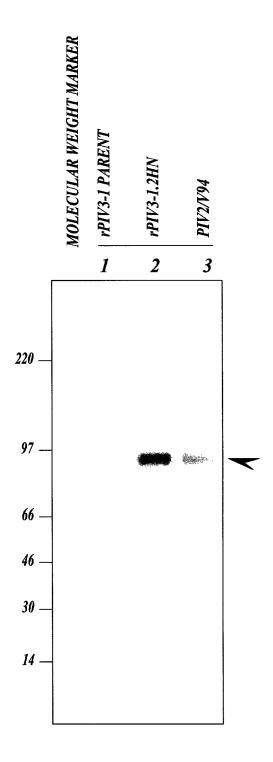


Fig. 5

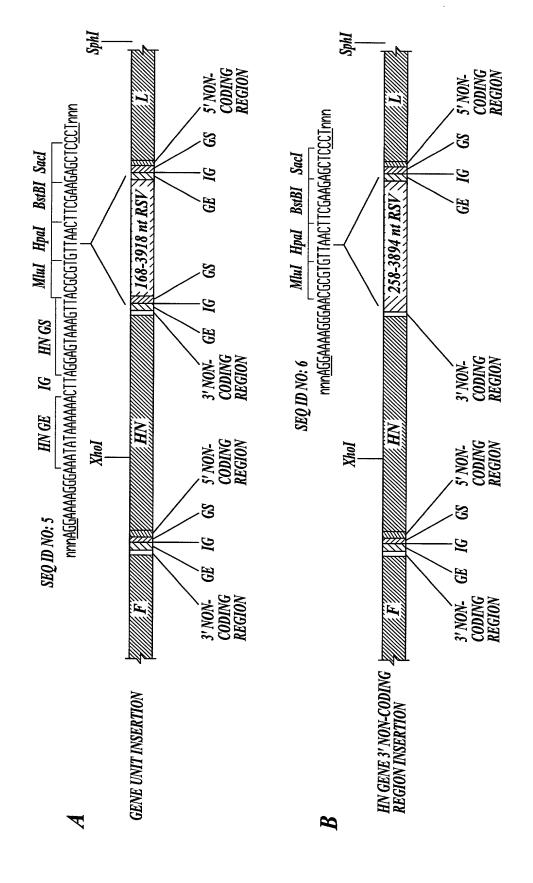


Fig. 6

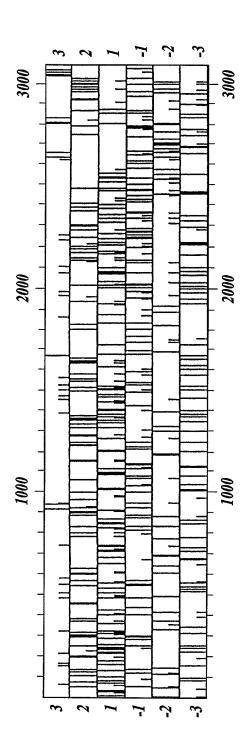
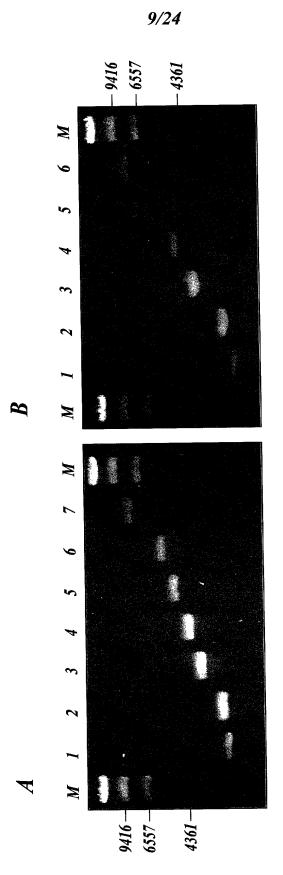
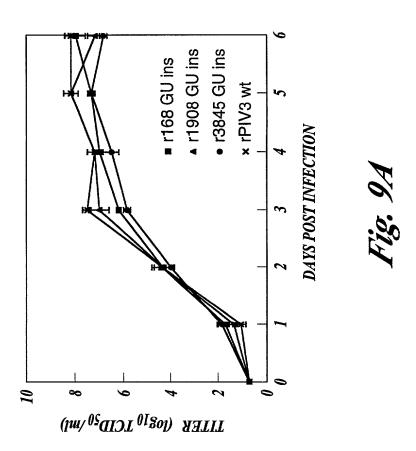
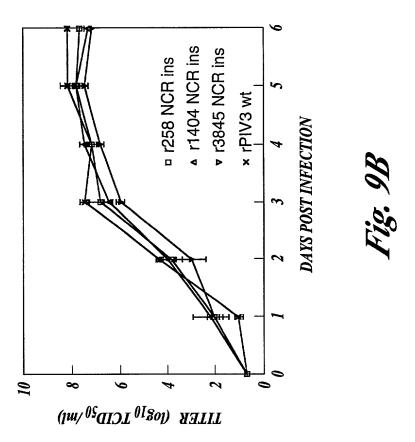


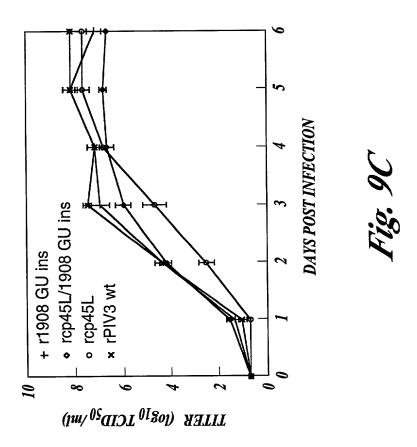
Fig. 1



rig. d







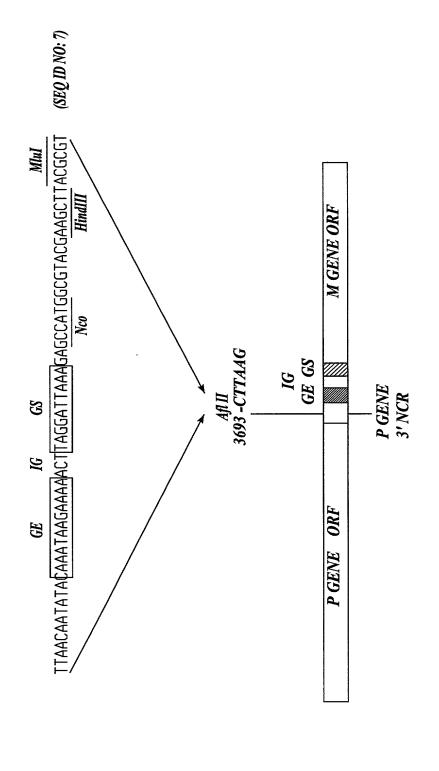


Fig. 10

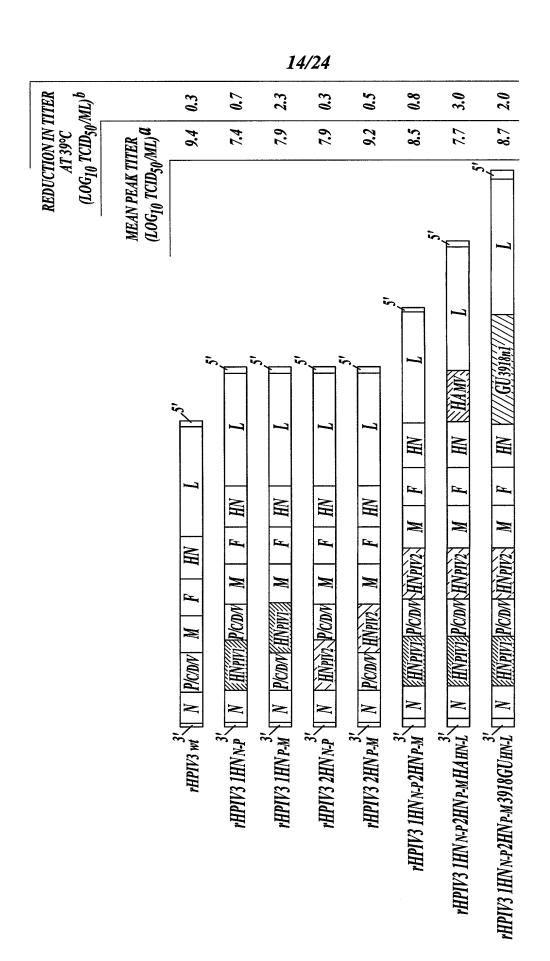


Fig. 11

Fig. 12

BPIV3 KANSAS

and the second s

(SEQ ID NO: 11)

TAA GE CTT GS AAGCTAGC

Niel Niel INSERTION OF RSV G OR F AS AN ADDITIONAL GENE UNIT IN A PROMOTER-PROXIMAL POSITION AGGATTAAAGAACTTTACCGAAAGGTAAGGGAAAGAAATCCTAAGA**GCTTAGC**GATG
(SEQID NO: 9)

Bipl TTACCGAAAGGTAAGGGGAAAGAAATCCTAAGA<mark>GCTTAGC</mark>G<u>ATG</u> (SEQ ID NO: 9) AGGATTAAAGAACTTTACCGAAAGGTAAGGGGAAAGAAATCCTAAGA**GCTTAGC**GATG (SEQ ID NO: 9) NONTRANSLATED REGION OF N NONTRANSLATED REGION OF N <u>با</u> ی GCTTAGCAAAAGCTAGCACA[ATG]]] (SEQ ID NO: 10) GCTTAGC G ATG || || AGGATTAAAGAACTI (SEQ ID NO: 12) GENE-START GENE-START GENE-START B/H PIV3-G1 B/H PIV3-F1 B/H PIV3 LEADER-

Fig. 13

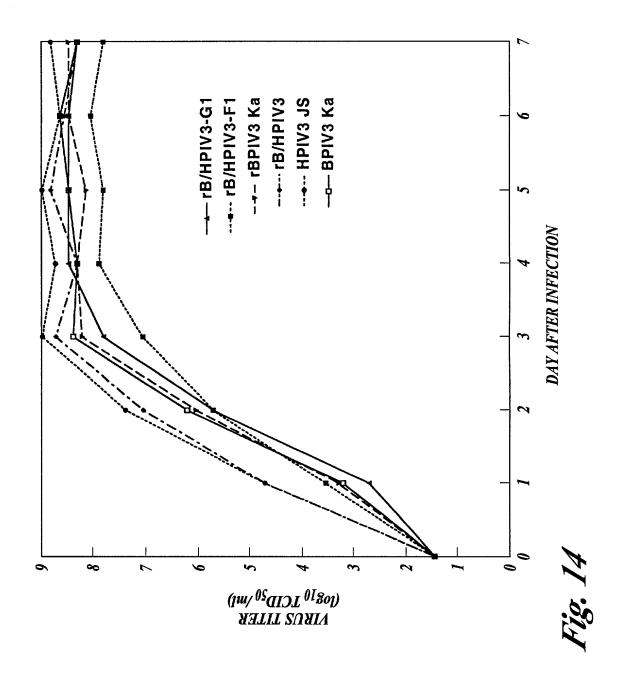
M

Z

B/H PIV3-F1 LEADER

M F HIV

B/H PIV3-G1 LEADER | G



RECOMBINANT BOVINE/HUMAN PIV3.1 EXPRESSING HPIV2 F AND HN FROM SUPERNUMERARY GENES

	SgrAI BSIWI
#1: rBPIV3	BINNE Proprie NA FRANCISCO DE LA CONTRACTOR DE LA CONTRAC
#2: rB/HPIV3	SgrAI BsiWI
#3: rB/HPIV3.1	Blp I Asc I Not I SgrAI BsiWI Si N FI HNI [5]
#4: rB/HPIV3.1-2HN	Blp I Asc I Asc I Not I SgrAI BsiWI Sign Not I HNI III I SgrAI BsiWI
#5: rB/HPIV3.1-2F	Blp I Asc I Not I SgrAI BsiWI 33 N Picon F2 F2 F3 HNI F3 F3 F3 F4 F5 F5 F5 F5 F5 F5 F5
	Blp I Asc I Asc I Not I Not I SgrAI BsiWI
#6: rB/HPIV3.1-2HN,2F	BANN / HIVI / PICON IFI IN III III IN II

Fig. 15

Fig. 16

pFLC HPIV3-1 HA_(P-M) cp45_I

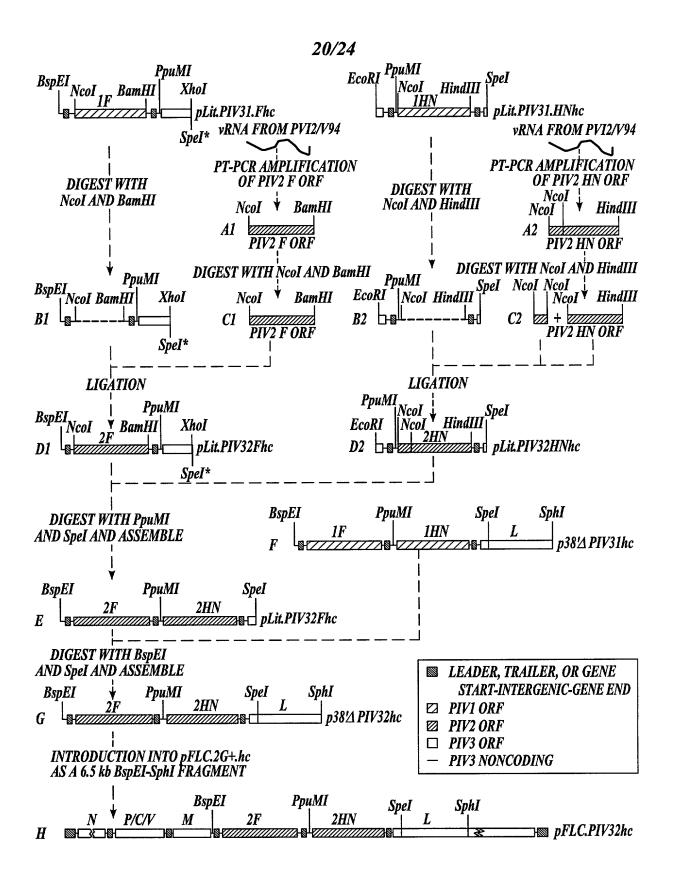


Fig. 17

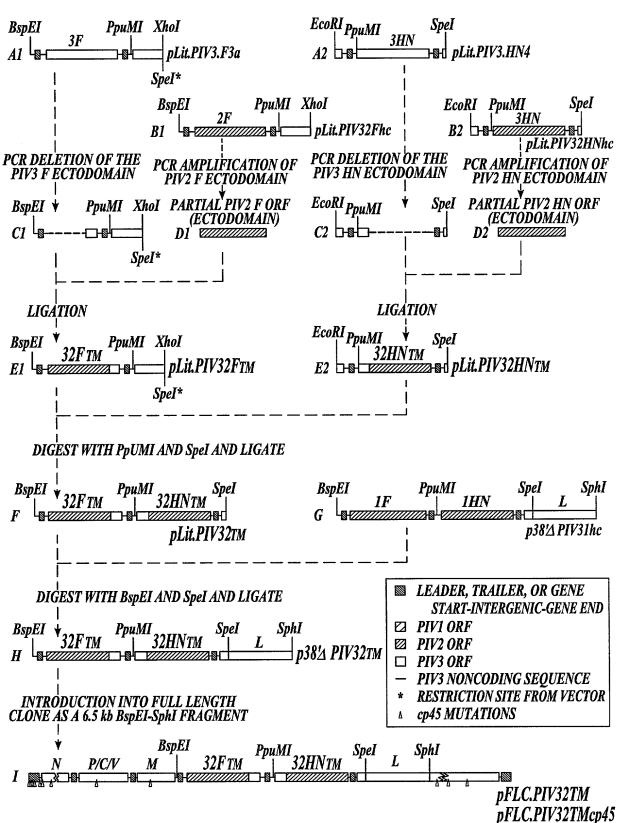
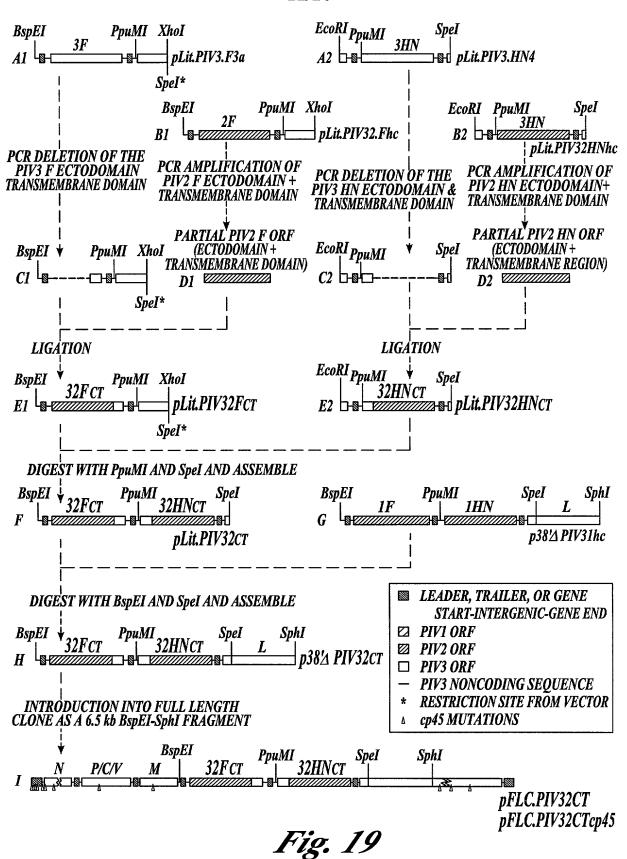


Fig. 18



23/24 A. GENETIC STRUCTURES OF PIV3-2 CHIMERIC VIRUSES COMPARED WITH PPIV3 PARENT AND PPIV3-1

A. GENETIC STRUCTURES OF PIV3-2 CHIMERIC VI	IRUSES COMPARED WITH rPIV3 PARENT AND rPIV3-1
rPIV3 rPIV3cp45	
rPIV3-2TM rPIV3-2TMcp45	46 6
rPIV3-2CT N P/C/V M	
rPIV3-2 N P/C/V M M (THEORETICAL, NOT RECOVERED)	
rPIV3-1 rPIV3-1cp45 N P/C/V M M (FROM PREVIOUS WORK: CONTROL VIRUS)	
PIV3 LEADER/TRAILER/GE-I-GS □ PIV1 ORF □ PIV2 ORF	□ PIV3 ORF — PIV3 NON-CODING SEQUENCE Δ cp45 MUTATIONS
B. CHIMERIC PIV3-2 F AND HN CONSTRUCTS WITH DOMAINS DERIVED FROM PIV3 F AND HN	H TRANSMEMBRANE AND CYTOPLASMIC
PIV3-PIV2FTM 494 490 490 490 490 490 490 490 490 490	PIV3 F TRANSMEMBRANE + CYTOPLASMIC DOMAINS PIV3 F 3'-ntr
W/H/W/////////////////////////////////	tc ata att att aca aac aaa taa cat atc tac aga i i i t n k *
ECTODOMAIN OF PIV2 F PIV3-PIV2HNTM 1 PIV3 HN TRANSMEMBRANE 41 PIV3 HN 5'-ntr + CYTOPLASMIC DOMAINS 1	487 PIV3 HN 3'-ntr
ttc aaa ttc gag atg gaa tac att aat tcc atc (AT JAK) m e y I N S I	<u> </u>
	ECTODOMAIN OF PIV2 HN EXTRA NUCLEOTIDES CYTOPLASMIC DOMAIN DERIVED FROM PIV3 F AND HN
PIV3-PIV2FCT 517 513	PIV3 F CYTOPLASMIC DOMAIN THE PIV3 F 3'-ntr
caa gca ctg aac ATG CAT CAT CTG GCC TAC ATG	ag tat tac ata aac aaa taa cat atc tac aga y y t n k *
PIV3-PIV2HNCT 1 PIV3 HN 31 23	487
PIV3 HN 5'-ntr CYTOPLASMIC DOMAIN tcc aaa ttc gag atg gaa tac ctc act att aag ALTAG	PIV3 HN 3'-ntr
	RANSMEMBRANE DOMAIN & ECTODOMAIN OF PIV2 HN

Fig. 20

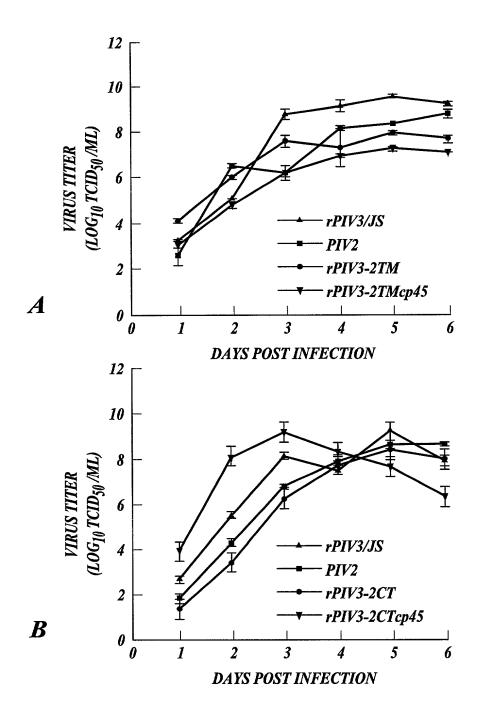


Fig. 21